UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5
77 WEST JACKSON BOULEVARD
CHICAGO, IL 60604-3590

OCT 26 2015

REPLY TO THE ATTENTION OF:

E-19J

Lisa Williams
U.S. Fish and Wildlife Service
East Lansing Field Office
2651 Coolidge Road East
East Lansing, Michigan 48823

RE: Draft Restoration Plan and Programmatic Environmental Impact Statement: Restoration Resulting from the Kalamazoo River Natural Resource Damage Assessment; Allegan and Kalamazoo Counties, Michigan (CEQ # 20150251)

Dear Ms. Williams:

The U.S. Environmental Protection Agency has reviewed a Draft Restoration Plan and Draft Programmatic Environmental Impact Statement (hereafter: DPEIS) for the Kalamazoo River Natural Resource Damage Assessment in Allegan and Kalamazoo Counties, Michigan. This letter provides EPA's comments on the DPEIS, pursuant to the National Environmental Policy Act (NEPA), the Council on Environmental Quality's NEPA Implementing Regulations (40 CFR 1500-1508), and Section 309 of the Clean Air Act.

Natural resources in Michigan have been injured by releases of polychlorinated biphenyls (PCBs) from historic Kalamazoo-area paper mills that contaminated natural resources in and near Portage Creek and the Kalamazoo River. These PCBs have migrated downstream in surface waters and have contaminated sediments, the water column, and biota in and adjacent to the lower three miles of Portage Creek, approximately 80 miles of the Kalamazoo River, and Lake Michigan. PCBs are also present in paper residuals disposed of in landfills and lagoons and other areas associated with former mill operations along the river corridor. Due to the potential risks the PCB releases posed to the environment and to human health, the Allied Paper, Inc./Portage Creek/Kalamazoo River Superfund Site (Kalamazoo River Superfund Site) was added to the National Priorities List (NPL) on August 30, 1990. The Kalamazoo River Superfund Site was later expanded to include 80 miles of the Kalamazoo River (from Morrow Dam to Lake Michigan), including the river banks and formerly impounded floodplains, as well as a 3-mile stretch of Portage Creek and four paper residual landfills.

The Michigan Department of Natural Resources (MDNR), the Michigan Department of Environmental Quality (MDEQ), the Michigan Attorney General, the U.S. Fish and Wildlife Service (USFWS), and the National Oceanic and Atmospheric Administration (NOAA),

collectively referred to as the Trustees, have been working to determine the extent of injuries to natural resources caused by these releases of PCBs. The Trustees have also been studying how to restore these injured natural resources and the services they provide to both other natural resources and the public. This evaluation is known as a natural resource damage assessment (NRDA), which is authorized under the Comprehensive Environmental Response, Compensation, and Liability Act (more commonly known as the federal "Superfund" law[1]). An NRDA is conducted to calculate the monetary cost, or "damages," of restoring natural resources that have been injured by releases of hazardous substances. Damages to natural resources are evaluated by identifying the functions or services provided by the resources, determining the baseline level of the services provided by the injured resources, and quantifying the reduction in service levels as a result of the contamination.

The Trustees use the term "Kalamazoo River Environment" (KRE) in the DPEIS to represent the entire NRDA assessment area. The KRE encompasses the Kalamazoo River Superfund Site along with any area where hazardous substances released from the Kalamazoo River Superfund Site have come to be located. Natural resources under the trusteeship of the Trustees that have been affected or potentially affected by releases of hazardous substances include, but are not limited to, surface water resources, including surface water and sediments (bed, bank, and shoreline) and adjacent floodplain soils of the Kalamazoo River and Portage Creek; groundwater resources; geologic resources; aquatic biota, including aquatic invertebrates and resident and migratory fish; and terrestrial biota, including terrestrial invertebrates, mammals, and birds.

The cleanup of PCBs at the Kalamazoo River Superfund Site has been underway for several years and is being coordinated by EPA. EPA's approach to the river cleanup focuses on first controlling ongoing sources of PCBs to the Kalamazoo River, and then addressing in-stream sediments. EPA is also addressing PCB risks in the floodplain and formerly-impounded areas. The DPEIS was developed to solicit public opinion on a proposed restoration program that would enable the Trustees to implement restoration as opportunities arise during, and adjunct to, the remedial actions that will be continuing over many years.

The DPEIS provides a programmatic-level environmental analysis to support the Trustees' proposed restoration program. As such, the programmatic analysis in the DPEIS studies broad issues and programmatic-level alternatives (as opposed to a document for a specific project or action) and provides guidance for future restoration activities to be carried out by, or conducted under the oversight of, the Trustees. In addition to providing a programmatic analysis, the Trustees intend to use the DPEIS to approve future site-specific actions, including two specific proposed restoration projects (Otsego City Dam Removal and Otsego Township Dam Removal).

The DPEIS analyzes three alternatives: a No Action alternative (Alternative A), and two restoration alternatives (Alternative B and Alternative C) that differ in geographic scope. Alternative B includes restoration projects conducted only on the Kalamazoo River and Portage Creek within the Kalamazoo River Superfund Site. Alternative C includes all the categories of projects outlined in Alternative B, but also includes restoration projects conducted in the broader Kalamazoo River watershed to create an alternative source for the ecological services lost or injured by the release of PCBs into the KRE. Alternatives B and C would likely include different amounts of each restoration project category and would likely differ as to when the majority of

[1] 42 United States Code (U.S.C.) §§ 9601–9675

the restoration would be conducted. Both Alternative B and Alternative C include the two proposed dam removal restoration projects (Otsego City Dam and Otsego Township Dam). The Trustees have identified Alternative C as their preferred alternative because it allows the most flexibility to meet the restoration objectives, both in terms of geographic locations and timing.

The sediments impounded behind Otsego City Dam and Otsego Township Dam contain PCBs. EPA's remediation and oversight of the Kalamazoo River Superfund Site includes these the location of these two dams. Contaminated sediments adjacent to each dam are located both in the river channel and adjacent floodplain areas, and must be removed before the retired dams can be removed. PCB-contaminated sediments impounded behind each dam would be removed or stabilized to achieve acceptable risk levels through the EPA sediment-remediation process, with the risk evaluation taking into account that the dam would be removed. As sediments are addressed during this process, the removal of these dams, and the restoration of the river and floodplains, becomes feasible. The removal of contaminated sediments and floodplain soils by EPA can be coordinated with the dam removals proposed by the Trustees.

The purpose of the proposed action and implementation of the Preferred Alternative is to restore or enhance ecological services in aquatic, riparian, and upland habitats of the KRE, which would benefit the types of natural resources injured by PCBs, and increase services provided to humans. The Federal actions are needed because the remediation response actions alone will not be sufficient to compensate the public for the ecological functions and natural resource services lost due to injuries from the PCB releases that began decades ago. The Trustees would conduct restoration only in any areas where remediation of PCBs has already occurred, or in conjunction with a removal action conducted by regulatory agencies (e.g., a dam removal following removal of contaminated sediments).

The Kalamazoo River NRDA was initiated nearly 15 years ago, and since that time, the Trustees have been directly engaging with the public, soliciting restoration project ideas, and working with local nonprofit and watershed groups. As restoration planning proceeds, the Trustees expect to have opportunities to settle natural resource damage claims with willing parties. The Trustees anticipate that most impacts associated with NRDA implementation would be the same or less than the impacts identified in this DPEIS, and that future project-specific NEPA documents (e.g., Environmental Assessments or Categorical Exclusions) could be developed that tier off of the final version of this DPEIS, as allowed.

Based on our analysis, EPA's rates the DPEIS as **"Environmental Concerns – Insufficient Information" (EC-2)**. Please see the enclosed "*Summary of Rating Definitions*." EPA recommends that the Final Programmatic EIS address the following comments, which generally relate to dam removals, wetlands, and adaptive management. Our comments on the DPEIS are as follows.

DAM REMOVAL

- The DPEIS is clear that the removal of PCB-contaminated sediments upstream of the Otsego City Dam and Otsego Township Dam would not be part of the proposed restoration actions themselves, but would be a precondition to the feasibility of removal of the dams. As such, the use of heavy equipment for the development of staging areas for sediment removal and handling of contaminated sediment waste would not be associated with dam removal

restoration actions. The Trustees would conduct the dam removals in conjunction with EPA-directed contaminated sediment removals and, as the DPEIS states, would not need to construct any additional water control structures, staging areas, or temporary roads. The DPEIS states that in some cases, natural channel restoration design might require removal of additional sediment or soil that is not contaminated with PCBs; however, this removal would be coordinated with the removal of contaminated sediments through the EPA-directed sediment remediation process and would likely not require any additional staging areas or temporary roads. It is possible the dams may be removed as part of the remedial actions themselves, but if not, the dams would be removed as a restoration project following EPA-directed remedial actions as described earlier.

While the DPEIS provided specific information on proposed dam removal techniques, the DPEIS was silent on the potential for both direct and indirect wetland impacts associated with potential drawdown, lowering of water levels, or narrowing of the river channel width upstream of each dam. Stabilization efforts and other in-water work, including the proposed installation of rock riffles, current river-channel fill (to move the location of the river's thalweg), bank stabilization measures, etc., that would require the placement of dredged or fill material into Waters of the U.S. were also not discussed in the DPEIS. These regulated impacts associated with the specific dam removals should have been specified in Section 5 - Environmental Consequences of the DPEIS. Section 5 of the DPEIS spoke in generalities regarding the programmatic-level restoration efforts that could be undertaken in the future, and broadly discussed programmatic-level impacts expected, but did not speak to specific impacts that would be expected with the proposed removals of the Otsego City Dam and Otsego Township Dam to be undertaken under both Alternative B and Alternative C.

Quantification of direct impacts to wetlands associated with the proposed dam removals was not provided in the DPEIS. Indirect wetland impacts were also not documented. Indirect wetland impacts would be attributed primarily to the loss of wetland hydrology associated with the drop in water level or loss of hydrology to adjacent wetlands following dam removal. In addition to the potential for direct wetland fill, the potential for loss of (via indirect impacts to) adjacent wetlands is of concern to EPA. Specific impacts and proposals are clearly known, as they are mentioned in the Otsego City Dam – Dam Removal and Channel Restoration Document (October 21, 2011) and Otsego Township Dam – Dam Removal and Channel Restoration (June 26, 2012). These Dam Removal and Channel Restoration Documents were mentioned in the Draft EA, but were not included as appendices to the DPEIS. These documents were mentioned in the DPEIS; however, the information provided within was not summarized and incorporated into the DPEIS, nor were these documents included as appendices to the DPEIS. EPA requested these documents during review of the DPEIS; they were received by EPA on September 29, 2015, and October 7, 2015. We have subsequently reviewed them.

Appendix B of the Otsego Township Dam – Dam Removal and Channel Restoration states, "*The project alternative requires creation of new riverbed and banks, floodplain excavation, draining and restoring impoundment areas, and impacts to the surrounding emergent wetlands. The project will involve draining the backwater areas and impacting approximately 1.4 miles of Kalamazoo River and its tributaries.*" Otsego Township Dam plans from the Dam Removal and Channel Restoration Document propose constructing haul

roads in the vicinity of potential wetland areas, filling several acres of river bottom to redirect the channel thalweg and modify the channel width, and relocating several unnamed tributaries that flow into the river within the project vicinity. This document does not clearly express if haul roads and construction staging areas are to be constructed solely for the dam removal and restoration projects, or if they will be constructed for Kalamazoo River Superfund Site remediation activities. Furthermore, these proposed impacts conflict with the DPEIS, which implies that some natural channel restoration design might be necessary, but does not explicitly describe that the proposal actually includes several miles of channel work along with 50+ acres of work in adjacent wetland and floodplain areas.

The DPEIS did not discuss any compensatory wetland mitigation, and appears to view the Preferred Alternative as "self-mitigating" and that no off-site compensatory mitigation for impacts (either direct or indirect) to wetlands would be expected or required. The DPEIS does not indicate whether project implementation will result in no net loss of wetlands. It also does not acknowledge that temporary wetland impacts will occur and will need to be restored, and does not provide any information on restoration or monitoring. EPA highlighted comparable comments on a 2014 EIS for the Ballville Dam Removal Project on the Sandusky River overseen by USFWS and the U.S. Army Corps of Engineers. That project proposed only one dam removal (versus the two dam removals proposed by the Trustees). Similar concerns were also raised by EPA for dam removals and modifications on the Boardman River near Traverse City, Michigan, in 2014. In the Ohio project, wetland mitigation under Sections 404 and 401 of the Clean Water Act was required for both direct and indirect wetland impacts associated with that dam removal by both U.S. Army Corps of Engineers and Ohio state regulatory agencies. While USFWS and NOAA are the Federal sponsors for this project, that does not preclude your agencies from following the same requirements and standards other agencies have been held to for similar projects.

Recommendations: The Final Programmatic EIS should be updated to include specific narrative information in Section 5 – Environmental Consequences on expected direct and indirect impacts to wetlands and aquatic resources from the two proposed dam removal projects. This should include adding information on sources for "*clean material*" to be utilized as fill in any aquatic environments[2]. Knowing that these areas are to be remediated as part of the Kalamazoo River Superfund Site, the discussion of clean fill sources should be developed further in the Final Programmatic EIS. Discussion of haul roads and construction staging areas as proposed in the Dam Removal and Channel Restoration Documents should also be further clarified with regard to entities responsible for their construction and their purpose (solely for restoration, or for remediation and also to be utilized during restoration), and their expected impacts (both temporary and permanent) to wetlands and aquatic resources.

The use of "emergent wetland seed mix" is proposed for areas to be disturbed or that were open water areas; the DPEIS is not clear if these areas are currently wetland. Additionally, many of these areas appear to currently be forested. Proposed mitigation for direct and indirect wetland impacts permanent and temporary impacts should be

[2] Section C-C (Sheet DR 1.3 – Profile and Cross Sections for Otsego Township Dam, Otsego Township Dam – Dam Removal and Channel Restoration (June 26, 2012) shades areas of river bottom "*to be filled with clean material from existing earthen dam and floodplain excavation.*"

discussed in the Final Programmatic EIS. Additionally, should mitigation be required for any wetland impacts associated with dam removals or proposed river thalweg adjustments/relocation/redirection, EPA recommends that the Trustees work to develop an acceptable mitigation ratio and mitigation plan to compensate for both direct and indirect wetland impacts that meets requirements of the 2008 Mitigation rule (40 CFR 230) as well as state requirements. Details on mitigation for both direct and indirect wetland impacts (including mitigation ratios, mitigation type, mitigation location(s), etc.), should be included in the Final Programmatic EIS.

Upland areas that are currently forested that will be disturbed should be restored as forested areas. Specifically, the Trustees should also commit to reforesting areas where trees may be required to be removed to install haul roads, staging areas, or other temporary containment or construction areas.

- The Otsego City Dam – Dam Removal and Channel Restoration Document (October 21, 2011) document describes three channel restoration alternatives with varying extents of contaminated sediment removal. Each of the three alternatives also proposes construction of a water control structure with stoplogs and an ice boom. As such, all alternatives would require the installation of concrete, structural steel, H-piles and steel sheeting, timber, bar grating, and riprap below the Ordinary High Water Mark of the Kalamazoo River. Furthermore, the document states (p. 17) that temporary access roads will be constructed out into the river to allow the contractor access to remove the dam itself. The DPEIS is not clear if such an in-river haul road would be constructed by EPA for remediation activities or if it would be solely for the dam-removal contractor to undertake construction of the proposed water control structure and remove the dam. The document did not discuss how normal river flow would be accommodated during the time the haul road is in place, as there was no specification for installation of culverts within the in-river haul road or construction of a coffer dam. Additionally, the Otsego City Dam document is not clear if a selected sub-alternative (Alternative 1, 2, or 3) has been determined to be a preferred alternative.

  The DPEIS did not discuss the three dam-removal alternatives under consideration for the Otsego City Dam, nor did it compare and contrast their impacts in Section 5 - Environmental Consequences. Again, Section 5 of the DPEIS spoke in generalities regarding the programmatic-level restoration efforts that could be undertaken in the future, and broadly discussed programmatic-level impacts expected, but did not speak to specific impacts that would be expected among the three sub-alternatives for removal of the Otsego City Dam. Page 18 of the 2011 document states, "*Currently, the three project alternatives all require creation of new riverbed and banks, floodplain excavation, draining and restoring impoundment areas, and impacts to the surrounding emergent, scrub-shrub, and forested wetlands...[and] will involve draining the impoundment and impacting between 12,174 and 14,472 feet of Kalamazoo River and its tributaries. Additionally, any...wetland habitat temporarily impacted by construction activities will need to be restored.*" However, Appendix B (plans) to the Otsego City Dam – Dam Removal and Channel Restoration Document (October 21, 2011) clearly shows channel and floodplain excavation along specific locations along several tributaries to the Kalamazoo River, including unnamed tributaries, the Gun River, and several oxbows to the Kalamazoo River. These plans show (varying location of) installation of engineered rock riffles, vegetated soil lifts, installation of

a rock toe or rock bank stabilization, and brush mattresses, all at specific locations and specific station numbers in very detailed proposed plans.

Furthermore, Appendix D to the Otsego City Dam – Dam Removal and Channel Restoration Document (October 21, 2011) is a copy of the Clean Water Act Section 404 joint permit application submitted to the U.S. Army Corps of Engineers and MDEQ for permitting; as such, specific impacts associated with the proposed dam removal are known and have been quantified. This means that a specific sub alternative (1, 2, or 3) has been selected for permitting approval, and as such, should have been included and discussed in detail in the DPEIS and appendices. Additionally, the summary of activities in the application mentions construction of temporary water control structures, temporary access roads, and cofferdams, which were not shown in the Appendix B plans. The application also does not discuss the nature of the sediments (PCB-contaminated) or that (or if) the proposal is being coordinated with EPA Superfund remediation efforts. The application does not propose any impacts to wetlands, although areas adjacent to the river and tributary channels are clearly wetland and are shown as wetland restoration and replanting areas in Appendix B plans.

Recommendations: The Final Programmatic EIS should compare and contrast impacts associated with the three alternatives under consideration for the removal of the Otsego City Dam, and specify if a preferred alternative has been selected. The Final Programmatic EIS should be updated to include specific narrative information on expected direct and indirect impacts to wetlands and aquatic resources expected from each sub-alternative of the proposed Otsego City dam removal in Section 5 – Environmental Consequences. Impacts to wetlands, both temporary and permanent, should be discussed. Proposed mitigation for direct and indirect wetland impacts, both permanent and temporary, should be discussed in the Final Programmatic EIS. Additionally, should mitigation be required for any wetland impacts associated with dam removals or proposed river thalweg adjustments/redirection and/or tributary relocation, EPA recommends that the Trustees work to develop an acceptable mitigation ratio and mitigation plan to compensate for both direct and indirect wetland impacts that meets requirements of the 2008 Mitigation rule (40 CFR 230) as well as state requirements. Details on mitigation for both direct and indirect wetland impacts (including mitigation ratios, mitigation type, mitigation location(s), etc.), should be included in the Final Programmatic EIS.

Upland areas that are currently forested that will be disturbed should be restored as forested areas. Specifically, the Trustees should also commit to reforesting areas where trees may be required to be removed to install haul roads, staging areas, or other temporary containment or construction areas.

- Both of the Dam Removal and Channel Restoration Documents show use of access roads and channel and floodplain excavation. The DPEIS states that the removal of contaminated sediments and floodplain soils by EPA can be coordinated with the dam removals proposed by the Trustees and that the Trustees would conduct restoration only in any areas where remediation of PCBs has already occurred, or in conjunction with a removal action conducted by regulatory agencies (e.g., a dam removal following removal of contaminated sediments). However, both of the Dam Removal and Channel Restoration Documents are

silent on coordination efforts with EPA for contaminated areas. Furthermore, no information was provided in the DPEIS or the Dam Removal and Channel Restoration Documents about how the Trustees are ensuring that they are "conducting restoration only in any areas where remediation of PCBs has already occurred, or in conjunction with a removal action conducted by regulatory agencies (e.g., a dam removal following removal of contaminated sediments)."

Recommendations: The Final Programmatic EIS should include a robust discussion on how the proposed dam removal activities as proposed in the Dam Removal and Channel Restoration Documents have been coordinated with EPA remediation activities. The Final Programmatic EIS should also provide assurances on how the dam removals, as proposed, would be conducted in areas where PCB remediation has already occurred, or how they will be undertaken in conjunction with EPA remediation and removal actions.

REPORTING ACTIVITIES

- The DPEIS states that the Trustees would require documentation of monitoring activities for all restoration projects, to include "*Annual monitoring reports and adaptive management actions that need to be taken.*" (Page 2-12). EPA acknowledges that the breadth and scope of specific restoration activities is not known at this time; however, the DPEIS did not propose a minimum length of monitoring for specific types or categories of restoration activities.

Recommendations: EPA supports adaptive management as a strategy to implement both remediation efforts and ecosystem restoration activities. A key feature of adaptive management is planning and implementing monitoring programs. Three types of environmental monitoring appear to be warranted, including baseline, impact, and compliance monitoring. The Final Programmatic EIS should attempt to group restoration activities by type or kind, and should define a minimum expected monitoring period for such groups of projects. Monitoring lengths and baseline monitoring required for specific types of projects may be driven by regulatory monitoring requirements (from necessary wetland or water permits), or from agency experience in long-term management. This should be further discussed in the Final Programmatic EIS. EPA recommends that the Trustees continue to identify and clarify the processes, data needs, key steps, and monitoring types to be utilized and undertaken to adaptively managing ecosystem restoration efforts in the future.

EPA understands that Superfund remediation activities, though necessary, may cause temporary detrimental impacts to the chemical, physical, and biological processes of ecosystems within the KRE. EPA supports remediation activities, and restoration activities, that are able to balance short-term habitat losses with overall restoration objectives. Additionally, EPA reiterates our support for a mixture of restoration project types that, when combined, will generate a broad suite of ecological benefits associated with the range of natural resource injuries within the KRE. The DPEIS notes that the Trustees prefer ecological restoration projects that include a water-related recreational or other human-use component over projects that are solely focused on improving human uses. It also notes that projects that incorporate resiliency to the impacts of climate change, and therefore provide longer-term benefits, are preferred. EPA supports these objectives and is in full support of the project.

Thank you for the opportunity to review and provide comments on this DPEIS. We are available to discuss our comments with you in further detail if requested. When the Final Programmatic EIS is released, please send one paper copy and one CD of the document to our office. If you have any questions about this letter, please contact the lead NEPA Reviewer, Ms. Liz Pelloso, PWS, of my staff at 312-886-7425 or via email at pelloso.elizabeth@epa.gov.

Sincerely,

Kenneth A. Westlake, Chief
NEPA Implementation Section
Office of Enforcement and Compliance Assurance

Enclosure: *Summary of Rating Definitions*

cc with enclosure (via email):
Todd Goeks, NOAA
Julie Sims, NOAA
Judith Alfano, MDEQ
Paul Bucholtz, MDEQ
Larry Poynter, MDEQ
Mark Schieber, MDEQ
Sharon Hanshue, MDNR
Jessica Mistak, MDNR